NEW SPECIES OF GALL MIDGES

By E. P. Felt, Albany, N. Y.

The following descriptions of Itonidæ relate to species recently reared or to reared forms recently determined as new.

Joanissia pennsylvanica n. sp. Male.—Length 1 mm. Antennæ presumably dark brown; fourteen segments, the fifth with a smooth stem about one-fourth longer than the oval subglobose enlargement; terminal segment produced, narrowly oval and with a stout apical process about 1–3 the length of the basal enlargement. Palpi; the first segment subglobose, the second narrowly oval, with a length twice its diameter, the third nearly as long, the fourth narrowly fusiform. Body colors presumably dark brown or fuscous as in other species. Wings hyaline, rather broad, the tip of subcosta apparently obsolete though it reaches about to the basal half of the wing, the third vein united to subcosta just before the point where it disappears by a long, oblique crossvein and joins the margin just beyond the apex, the fifth vein disappearing distally. Metatarsus of the posterior legs about two and one-half times the length of the second segment; claws strongly curved almost at right angles, slender, the pulvilli shorter than the claws. Genitalia apparently of the normal type as in J. photophila Felt.

Female.—Length 1.25 mm. Antennæ with eleven segments, the fifth with a stem about as long as the narrowly ovate basal enlargement. Ov positor short, triarticulate, the terminal lobe narrowly oval and thickly clothed apically with long, stout setae.

Reared from peony roots collected by B. H. Farr of Reading, Pa., and submitted for study by Prof. H. A. Surface. Type C al928.

KRONOMYIA n. g.

The remarkable form described below is evidently allied to Brachyneura Rond., though readily separated therefrom by the four long veins, the fifth and sixth being simple, and the totally different antennal structure. The antennæ in the female of this species have but twelve segments, the apical evidently composed of two closely fused reduced segments, the other flagellate ones with a short stem and a short, stout basal enlargement ornamented with a basal whorl of long, stout setæ and a thick band of short, curved setae. The The biarticulate palpi with the greatly produced, capitate terminal segment and the peculiar ovipositor, all serve to differentiate this species from allied genera. Type K. populi n. sp.

Kronomyia populi n. sp. Female.—Length 1.75 mm. Antennæ extending to the second abdominal segment, thickly haired, fuseous; twelve segments, the first broadly obconic, the second very short, almost disk-shaped, the third and fourth free, the fifth with a stem about one-fourth the subcylindric basal enlargement, which latter has a length one-half greater than its diameter, a sparse subbasal whorl

of very long, stout setæ and a thick subapical band of shorter, strongly curved setæ; terminal segment produced, with a length over four times its diameter and tapering nearly uniformly to a subacute apex. Palpi; first segment narrowly oval, with a length about one-half greater than its diameter, the second segment with a length three times the first, the basal half slender, the distal portion greatly enlarged and sparsely setose. Mesonotum dark brown. Scutellum sooty white basally, fuscous apically, post-scutellum sooty white. Abdomen with the sclerites fuscous yellowish the incisures and pleuræ whitish. Ovipositor fuscous, the terminal lobes yellowish. Wings fuseous, thickly clothed with narrow scales; costa black, thickly scaled, subcosta uniting therewith at the basal third, the third vein well beyond the apex, the simple fifth at the distal third, the sixth near the basal half, the two latter rudimentary. Halterese whitish basally, fuscous apically; tibix and tarsi a somewhat variable fuscous. Claws stout, strongly curved, unidentate, the pulvilli about one-third the length of the claws. Ovipositor strongly curved ventrally and anteriorly, the convex rounded surface chitinized, its surface and the dorsal and ventral plates of the preceding segment with numerous chitinous, finely denticulate, transverse ridges; terminal lobes extending posteriorly, slender, with a length about four times the diameter, narrowly rounded apically and sparsely setose.

Reared from punky poplar wood collected at Nassau, N. Y.Type C. a 2152.

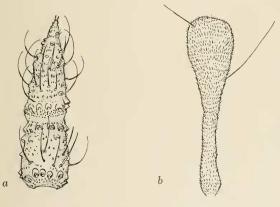


Fig. 11. Kronomyia populi, female: a, terminal antennal segment; b, distal palpus segment (Original)

Oligarces ulmi n. sp. Male.—Length 0.8 mm. Antennæ short, very sparsely haired, whitish transparent; eleven segments, the fifth subcylindric, with a length about one-fourth greater than its diameter; terminal segment slightly produced, sometimes nearly fused with the preceding, and with a length nearly one half greater than its diameter, and broadly rounded apically. Mesonotum light brown. Scutellum yellowish transparent, postscutellum slightly fuscous. Abdomen yellowish orange, reddish basally, the genitalia a light fuscous. Halteres whitish transparent. Legs yellowish transparent; claws long, moderately stout, nearly straight, the pulvilli rudimentary. Genitalia; basal clasp segment moderately long, stout, obliquely truncate; terminal clasp segment long, stout, swollen near the middle, broadly rounded apically and thickly setose; dorsal plate short, broadly and roundly emarginate, the lobes broadly rounded and sparsely setose; ventral plate long,

broadly and roundly emarginate, the lobes short, broadly rounded and sparsely setose. Style long, tapering, narrowly rounded apically. Occasionally a pale vellowish male may be observed.

Reared in large numbers from decaying elm bark collected at Nassau, N. Y., March 11, 1911. Type C. a2136.

Winnertzia pectinata n. sp. Male.—Length, 1.75 mm. Antennæ fuscous yellowish; fourteen segments, the fifth with a stem three-fourths the length of the subcylindric basal enlargement, which latter has a length one half greater than its diameter; terminal segment with a length about twice its diameter, narrowly rounded apically. Palpi yellowish transparent, first segment with a length fully two and one half times its diameter, the second with a length thrice its diameter, the third a little longer than the second, the fourth fully one-half longer than the third. Face fuscous yellowish. Mesonotum dull fuscous brown. Scutellum and postscutellum brownish black. Abdomen fuscous yellowish, the small, irregularly ovoid dorsal sclerites slightly fuscous; terminal segments and gentalia fuscous. Wings hyaline, costa dark brown. Halteres yellowish transparent. Coxae and femora mostly yellowish transparent; tibiæ light fuscous yellowish; tarsi mostly fuscous yellowish, the fifth segment of the midtarsi yellowish; claws stout, strongly curved, unidentate, the pulvilli short. Genitalia; basal clasp segment moderately long, stout; terminal clasp segment long, swollen at the distal fourth and apically with a strongly pectinate chitinous spur; dorsal plate moderately long, broad, broadly and slightly emarginate, the lobes broadly rounded; ventral plate long, deeply and triangularly emarginate, the lobes broad, truncate and sparsely haired.

Reared from partly decayed chestnut bark collected at Nassau, N. Y., April 26, 1911. Allied to W. calciequina Felt. Type C. a2109.

Rhizomyia hirta n. sp. Female.—Length 1 mm. Antennæ rather thickly haired; twelve segments, the fifth with a stem one-fourth the length of the cylindric basal enlargement, which latter has a length two and one half times its diameter; terminal segment with a length six times its diameter. Palpi; first segment short, stout, the second subrectangular, with a length four times its diameter, the fourth a little longer, slender. Mesonotum fuscous yellowish. Scutellum, postscutellum and abdomen reddish yellow, the basal segment fuscous. Wings hyaline, costa dark brown, subcosta uniting therewith at the basal fourth. Halteres yellowish, fuscous subapically. Coxæ and femora basally yellowish; femora distally and tibiæ fuscous yellowish, the tarsi darker; claws long, slender, strongly curved, the pulvilli shorter than the claws. Ovipositor short, terminal lobes broadly ovate and sparsely setose.

Reared from a reddish, blister-like leaf mine on Cratægus taken at Bath, N. Y. Type C. a1756a.

Dasyneura communis n. sp. Male.—Length 1.3 mm. Antennæ dark brown; sixteen segments, the fifth with a stem three-fourths the length of the cylindric basal enlargement, which latter has a length one-half greater than its diameter; terminal segment produced, tapering to a narrowly rounded apex with a length five times its diameter. Palpi; first segment short, incrassate, the second narrowly oval, the third one-half longer, slender, the fourth one-fourth longer and more slender. Mesonotum shining dark brown. Scutellum and postscutellum dark brown. Abdomen

dark brown, the segments margined posteriorly with yellowish setæ; membrane and pluræ yellowish orange; venter orange yellowish; genitalia fuscous yellowish. Wings hyaline, costa dark brown. Halteres yellowish orange. Coxæ fuscous yellowish; femora and tibiæ mostly cinereous, slightly fuscous apically; tarsi mostly dark brown; claws long, slender, strongly curved, the pulvilli as long as the claws. Genitalia; basal clasp segment stout, truncate; terminal clasp segment rather long, stout; dorsal plate broad, deeply and triangularly emarginate, the lobes narrowly rounded and sparsely clothed with long setæ apically; ventral plate long, deeply and broadly emarginate, the lobes tapering to a narrowly rounded, sparsely setose apex. Harpes broad, stout, irregular apically; style short, stout.

Female.—Length 1.5 mm. Antennæ fuscous yellowish; sixteen subsessile segments, the fifth with a length three-fourths greater than its diameter; terminal segment produced, narrowly rounded apically. Palpi; first segment short, stout, irregular, second subquadrate, with a length three t'mes its width, the third one-half longer, slender, the fourth one half longer than the third. Mesonotum shining dark brown, the submedian lines thickly haired. Scutellum dark reddish brown, post-scutellum dark orange. Abdomen dark brown, the segments sparsely setose posteriorly; membrane, pluræ and venter dark reddish; ovipositor pale orange. Wings hyaline, costa dark brown. Halteres yellowish I asally, reddish orange apically. Coxae fuscous orange; femora and tibiæ yellowish straw; tarsi slightly darker, especially the distal segments. Ovipositor as long as the abdomen, the terminal lobes narrow oval sub-acute apically.

Reared from jar containing maple leaves bearing reddish tinted pouch, vein galls ¼ inch long. Type C. a1133.

Dasyneura gibsoni n. sp. Male.—Length 1.5 mm. Antennæ dark brown; fifteen segments, the fifth with a stem one fourth longer than the cylindrical basal enlargement, which latter has a length one fourth greater than its diameter; terminal segment reduced, narrowly oval. Palpi; first segment short, subquadrate, the second with a length nearly three times its width, narrowly rounded, the third one half longer than the second, slender, the fourth nearly as long as the third, somewhat dilated. Mesonotum dark brown. Scutellum reddish brown, post-scutellum yellowish brown. Abdomen dark brown. Genitalia fuscous. Wings hyaline, costa dark brown, the third vein nearly straight. Halteres yellowish transparent. Coxæ and femora mostly fuscous yellowish, the tibiæ and tarsi dark brown. Claws slender, strongly curved, unidentate, the pulvilli nearly as long as the claws. Genitalia; basal clasp segment rather long, stout; terminal clasp segment stout, tapering; dorsal plate deeply and triangularly incised, the lobes narrowly rounded; ventral plate triangularly emarginate, the lobes stout, tapering. Harpes long, tapering, tuberculate. Style short, narrowly rounded.

Female.—Length 1.75 mm. Antennæ fuscous yellowish; fifteen subsessile segments, the fifth with a length one half greater than its diameter; terminal segment somewhat reduced, and partly fused with the preceding. Scutellum and post-scutellum fuscous yellowish. Abdomen dark brown. The fuscous yellowish ovipositor, about as long as the body, terminal lobes rather broad, with a length about twice the diameter, narrowly rounded apically. Halteres, coxæ and base of femora pale yellowish, the distal portion of femora, tibiæ and tarsi fuscous yellowish. Other characters nearly as in the male.

Reared from flower heads of Canada thistle, Cirsium arvense collected by Arthur Gibson in the vicinity of Ottawa, Canada. Allied to D. salicifolia Felt. Type C. a2221.

Dasyneura pergandei n. sp. Male.—Length 1.5 mm. Antennæ dark brown or black; seventeen segments, the fifth having a stem as long as the cylindrical basal enlargement, which latter has a length one half greater than its diameter; terminal segment reduced, narrowly oval, with a length twice its diameter. Palpi; first segment subrectangular, with a length fully twice its diameter, the second a little longer, stouter, the third one fourth longer and more slender, the fourth a little longer than the third. Mesonotum dark brown, the submedian lines fuscous yellowish. Scutellum and postscutellum fuscous yellowish. Abdomen dark red. Wings hyaline, costa yellowish, the slightly curved third vein uniting therewith at the distal ninth. Halteres reddish orange. Legs reddish yellow; claws stout, strongly curved, the pulvilli as long as the claws. Genitalia obscured in the preparation.

Female.—Length 1.5 mm. Antennæ fuscous yellowish; eighteen segments, the fifth cylindric, with a length twice its diameter; terminal segment with a length twice its diameter and tapering to a subacute apex. Palpi nearly as in the opposite sex. Ovipositor when extended probably as long as the body, the terminal lobes with a length three times the diameter, tapering distally and sparsely setose.

Reared by Theodore Pergande in 1878 from swollen fruit of wild cherry collected by Prof. C. V. Riley at Glenn Ayrie, Col.

Dasyneura smilacifolia n. sp. Male.—Length 0.75 mm. Antennæ dark brown, with fifteen to seventeen segments, the fifth with a stem about three fourths the length of the basal enlargement, which latter has a length two and one fourth times its diameter. The terminal segment may be greatly prolonged, slender and evidently composed of two closely fused, or reduced and sessile. Palpi; first segment irregularly subquadrate, the second with a length about two and one-halftimes the diameter, rounded at each extremity, the third a little longer, more slender, the fourth one half longer than the third. Mesonotum reddish brown. Scutellum, postscutellum and abdomen mostly fuscous yellowish, the latter sparsely haired. Genitalia light fuscous. Wings hyaline, costa dark brown. Halteres yellowish basally, fuscous apically. Coxe and femora a pale straw, the tibiæ fuscous yellowish, the tarsi a light fuscous, the distal tarsal segments darker; claws slender, strongly curved, unidentate; pulvilli a little shorter than the claws. Genitalia; basal clasp segment rather long, moderately stout; terminal clasp segment stout, slightly curved; dorsal plate deeply and triangularly incised, the lobes narrowly rounded and sparsely setose; ventral plate rather short, broad, broadly rounded. Harpes long, tapering, slightly subtruncate and irregularly tuberculate apically.

Female.—Length 0.9 mm. Antennæ dark brown; sixteen subsessile segments, the fifth with a length about twice its diameter; terminal segment reduced, subglobose. Mesonotum reddish brown. Scutellum, postscutellum and abdomen fuscous yellowish, the latter sparsely haired and in some specimens reddish orange. Ovipositor fuscous yellowish and nearly as long as the abdomen when extended; terminal lobes slender, with a length nearly four times the width, sparsely and minutely setose apically. Other characters practically as in the male.

Reared the latter part of August from rolled leaves of Smilax, (green brier) collected by Miss Cora H. Clarke at Magnolia, Mass. Allied to D. clematidis Felt. Type C. a2214.

Cystiphora viburnifolia n. sp. Female.—Length 1 mm. Antennæ pale orange; fourteen subsessile segments, the fifth with a length one fourth greater than its diameter; terminal segment reduced, narrowly oval. Palpi; first segment with

a length twice its diameter, the second and third subequal. Mesonotum brownish orange. Scutellum and postscutellum pale orange. Abdomen pale vellowish. The ovipositor short, the basal fleshy portion light orange, the distal part cultriform, sparsely setose apically. Wings rather narrow, costa pale straw. Halteres whitish transparent. Coxe and femora mostly pale yellowish; tibiæ fuscous yellowish, the tarsi mostly dark brown; claws long, slender, evenly curved, unidentate, the pulvilli as long as the claws.

Reared from an inconspicuous elevation on the under side of the leaf of hobble bush, Viburnum, taken by Miss Cora H. Clarke at Magnolia, Mass. Superficially it resembles Sackenomyia viburnifolia Felt. Type C. a1897.

Asteromyia nigrina n. sp. Female.—Length 1.2 mm. Antennæ dark brown, the distal segments yellowish; seventeen segments, the fifth having a length about equal to its diameter; the terminal segment with a length over twice its diameter. Palpi; first segment short, irregular, the second narrowly oval, with a length about twice its diameter, the third a little longer and more slender. Mesonotum dark brown, scutellum dark reddish brown, with a few whitish scales or setæ apically; postseutellum dark brown. Abdomen a nearly uniform dark brown, almost black. Wings hyaline, costa dark brown, the third vein uniting therewith at the basal half. Halteres fuscous yellowish. Coxe dark brown; femora, tibiæ and tarsi dark brown, the first and second segments narrowly annulate basally with whitish. Ovipositor about half the length of the abdomen; terminal lobes very broadly and irregularly oval, thickly setose.

Reared from a jar containing inconspicuous blister galls on the leaves of witch hazel, Hamamelis virginica collected by Miss Cora H. Clarke at Magnolia, Mass. Type C. a1780b.

Asteromyia reducta n. sp. Male.-Length 1.5 mm. Antennæ blackish; twelve segments, the fifth with a length about equal to its diameter; terminal segments produced, with a length two and one half times its diameter, narrowly rounded apically. Palpi uniarticulate. Mesonotum dark reddish brown. Scutellum reddish brown; postscutellum a little darker. Abdomen dark brown, the distal segments reddish; genitalia fuscous. Wings hyaline, costa dark brown, the third vein uniting with the margin at the basal half. Halteres fuscous basally, whitish apically. Legs fuscous yellowish, the distal tarsal segments lighter; claws long, moderately slender, the pulvilli nearly as long as the claws. Genitalia; basal clasp segment moderately stout, truncate; terminal clasp segment short, swollen basally; dorsal plate deeply and triangularly divided, the lobes broadly rounded, sparsely setose; ventral plate broad, broadly rounded, sparsely setose. Halteres irregularly triangular; style short, stout, broadly rounded.

Female.-Length 1.5 mm. Antennæ with thirteen or fourteen segments, the fifth with a length about equal to its diameter; terminal segment with a length about twice its diameter, broadly rounded apically. Color characters nearly as in the opposite sex, except that the distal segments of the abdomen seem to be a more nearly uniform reddish brown. Ovipositor when extended, about half the length of the abdomen, the terminal lobes narrowly oval, with a length twice the width

and thickly setose.

Reared from an irregularly oval, blackish blister gall with a diameter of 4 mm. on *Aster undulatus* collected at Magnolia, Mass., by Miss Cora H. Clarke. Type C. a2056.

Lasioptera allioniæ n. sp. Female.—Length 1.25 mm. Antennæ short, fuscous; sixteen segments, the fifth with a length three fourths its diameter. Palpi; the first segment short, incrassate, the second quadrate, with a length about twice its diameter, the third probably as long as the second, the fourth slender and presumably one-half longer than the third. Mesonotum dark brown, broadly margined laterally and anteriorly with short, silvery scales. Scutellum fuscous, sparsely clothed with silvery scales, postscutellum fuscous. Abdomen a nearly uniform purplish black, the first to the sixth segments with submedian, triangular, whitish spots posteriorly; venter suffused with white scales. Wings hyaline, costa dark brown, the discal spot just before the basal half, the third vein uniting with costa near the basal third. Halteres snow white. Coxæ dark brown; femora and tibiæ yellowish basally, dark brown apically; tarsi dark brown, probably banded; ovipositor yellowish, about as long as the abdomen, the lobes narrowly oval, setose.

Male.—Length 1.75 mm. Antennæ dark brown; sixteen segments, the fifth with a length about one fourth greater than its diameter, the terminal segment broadly rounded apically, with a length three fourths its diameter. Mesonotum dark brown, almost black, the submedian lines sparsely haired. Scutellum and postscutellum dark brown. Abdomen apparently nearly uniformly clothed with dark brown scales; genitalia fuscous. Wings hyaline, costa dark brown, the third vein uniting therewith near the basal half. Coxæ, femora and tibiæ fuscous yellowish, the tarsi darker; elaws long, pulvilli shorter than the claws. Genitalia; basal clasp segment long, truncate; terminal clasp segment short, swollen basally; dorsal plate deeply and triangularly incised, the lobes tapering, narrowly rounded; ventral plate rather long, broadly rounded. Harpes stout, tapering; style narrowly rounded apically.

Reared from an irregular, fusiform, stem gall on Oxybaphus (Allionia) taken by Prof. E. Bethel at Boulder, Col. Type C. a2026.

Lasioptera arizonensis n. sp. Male.—Length 1.75 mm. Antennæ dark brown; sixteen segments, the fifth with a length one-fourth greater than its diameter; terminal segment slightly produced, broadly oval. Palpi; the first segment short, stout, the second with a length about two and one half times its diameter, the third a little longer, more slender, the fourth one half longer than the third, more slender. Mesonotum dark brown, the submedian lines thickly clothed with golden yellow scales. Scutellum and postscutellum dark brown. Abdomen dark brown, the basal segment and submedian spots on segments two to five silvery white; genitalia fuscous. Wings hyaline, costa dark brown, subcosta uniting with the anterior margin near the basal third, the third vein at the basal half. Halteres pale fuscous yellowish. Legs mostly dark brown, the apices of femora and tibiæ with the second and third tarsal segments, and the fifth and sixth tarsal segments somewhat darker; claws long, slender, strongly curved, unidentate, the pulvilli as long as the claws. Genitalia; basal clasp segment long, roundly truncate; terminal clasp segment with the basal third strongly swollen; dorsal plate short, stout, deeply and narrowly incised, the lobes broadly rounded; ventral plate long, slender, broadly rounded and sparsely setose apically. Harpes long, slender, irregularly tuberculate; style long, broadly rounded apically.

Female.—Length 2 mm. Antennæ dark brown, twenty segments; the fifth with

a length about one-fourth greater than its diameter; terminal segment produced, broadly rounded. Mesonotum shining dark brown. Scutellum reddish brown, postscutellum dark brown. Abdomen a nearly uniform dark brown, the segments narrowly margined with a few white setæ. Coxæ, femora and tibiæ a variable fuscous yellowish, slightly darker distally; tarsi nearly uniform yellowish brown. Ovipositor nearly as long as the abdomen, with conspicuous lateral basal patches of halberd-shaped scales; terminal lobe long, slender, narrowly rounded apically and with a thick dorsal group of stout, slightly recurved, chitinous spines; minor lobe short, stout.

Reared from stems of *Senecio arizonensis* taken at Oracle, Ariz., April 22, 1899. Received through U. S. Bureau of Entomology. Type C. 1062.

Neolasioptera agrostis n. sp. Male.—Length 1.25 mm. Antennæ light brown; probably twenty or more segments, the fifth with a length a little greater that its diameter. Palpi; the first segment irregularly subquadrate, the second narrowly oval, the third a little longer, the fourth one fourth longer and more slender than the third. Mesonotum reddish brown, sparsely clothed with short yellowish scales. Scutellum light reddish brown, postscutellum dark reddish brown. Abdomen dark brown, the dorsum of the first to the fourth abdominal segments thickly clothed with silvery white scales. Wings hyaline, costa dark brown, subcosta uniting with the anterior margin near the basal third, the third vein just beyond the basal third. Halteres whitish transparent. Legs pale yellowish; Genitalia; basal clasp segment rather long, truncate; terminal clasp segment swollen at the base, tapering; dorsal plate rather long, broad, deeply and triangularly emarginate, the lobes tapering, obliquely rounded, setose; ventral plate long, broad, tapering, narrowly rounded. Harpes long, slender, tuberculate; style long, slender, narrowly rounded.

Female.—Length 1.25 mm. Antennæ dark brown; twenty-four segments, the fifth with a length a little less than its diameter; terminal segment narrowly oval. Palpi; the first segment with a length twice its diameter, the second narrowly oval, the third one third longer than the second, the fourth a little longer. Mesonotum dark reddish brown. Scutellum yellowish apically, reddish brown basally, postscutellum dark brown. Abdomen dark brown, the basal segment thickly clothed with silvery white scales, the second to fourth segments with lunate submedian silvery spots. Tarsi dark brown; claws long, slender, unidentate, the pulvilli as long as the claws. Ovipositor nearly as long as the abdomen, the dorsum of the seventh segment with submedian irregular chitinous thickenings, terminal lobes long, stout, narrowly rounded and thickly setose. Other characters as in the male.

Reared in September from *Eragrostis minor* and loaned for study by the U. S. National Museum. Type C. 1063.

Neolasioptera squamosa n. sp. Male.—Length 1.25 mm. Antennæ light brown; twelve segments, the fifth with a length a little greater than its diameter, terminal segment produced, tapering to a narrowly oval apex. Palpi; the second segment narrowly oval, the third longer, stouter, the fourth with a length more than twice the third. Mesonotum reddish brown, the submedian lines very thickly clothed with divergent yellowish white scales. Scutchlum and postscutchlum pale yellowish. Abdomen apparently a yellowish brown, with rudimentary submedian silvery markings; genitalia pale yellowish. Wings hyaline, rather long, narrow, costa dark brown, subcosta uniting with the anterior margin near the basal third, the third vein at the

long, white discal spot on the basal half. Halteres pale yellowish. Coxe and the femora mostly pale yellowish; tibiae and tarsi dark brown except that the first tarsal segment and the extremities of the others, except the distal one of the fifth are rather broadly banded with yellowish white; claws long, slender, unidentate, the pulvilli nearly as long as the claws. Genitalia; basal clasp segment long, roundly truncate; terminal clasp segment swollen basally, tapering, obtuse apically; dorsal plate long, broad, narrowly incised, the lobes broadly rounded; ventral plate long, slender, rounded. Harpes short, stout, tapering, obtuse; style rather short, stout, rounded.

Reared from grass (presumably a gall) taken August 11, 1891 at Cadet, Mo. and loaned for study by the U. S. National Museum. Type C. 909.

Neolasioptera trimera n. sp. Female.—Length 1.5 mm. Antennæ dark brown, sparsely haired, twenty-one segments, the fifth with a length about one half its diameter, the last segment broadly oval. Palpi; first segment short, stout, irregular, the second almost subglobose, broadly oval, the third nearly twice the length of the second, slender. Mesonotum dark brown, the submedian lines sparsely haired. Seutellum reddish brown, postscutellum a little darker. Abdomen a nearly uniform dark brown, the segments very sparsely margined posteriorly with a few whitish hairs. Wings hyaline, costa dark brown, the third vein uniting with costa near the basal half, discal spot large. Halteres yellowish white. Legs a nearly uniform reddish brown; claws unidentate, the pulvilli nearly as long as the claws. Ovipositor yellowish, about half the length of the body; terminal lobes narrowly oval, thickly clothed with stout setæ.

Reared from a stem gall on sunflower taken at Fort Grant, Ariz., and loaned for study by the U. S. National Museum. Type C. 907.

Rhopalomyia gnaphalodis n. sp. Female.—Length 2 mm. Antennæ reddish brown; seventeen or eighteen subsessile segments, the fifth with a length about two and one half times its diameter; terminal segment slightly produced or fused with the preceding. Palpi; first segment short, subglobose, the second narrowly oval. Mesonotum shining reddish brown. Seutellum reddish brown, postseutellum darker. Abdomen sparsely haired, deep reddish, the basal segment darker. Costa pale straw. Halteres yellowish. Coxæ reddish brown; femora fuscous yellowish; tibiæ reddish, darker apically; tarsi reddish brown; distal tarsal segments missing in specimen; the fuscous yellowish ovipositor stout, nearly as long as the body, the lobes narrowly oval, sparsely setose.

Reared by Prof. T. D. A. Cockerell, Boulder, Col., from a woolly, polythalamous gall, diameter 1 cm., on *Artemisia gnaphalodes*. Type C. 1382.

(To be continued.)